

**MINUTES OF THE MEETING OF THE
BENCHMARK COMMITTEE OF THE
WASHINGTON STATE TRANSPORTATION COMMISSION
January 18, 2002**

The meeting of the Benchmark Committee of the Washington State Transportation Commission was called to order at 9:00 a.m., on January 18, 2002, at the Wyndham Seattle-Tacoma Airport Hotel, Seattle, Washington.

Committee members present were: Aubrey Davis, A. Michèle Maher, and Chris Marr. Also present were Commissioner Elmira Forner and Commissioner Ed Barnes. Secretary Doug MacDonald, Chris Rose, Transportation Commission Administrator, Paula Hammond, Chief of Staff, Jerry Lenzi, Regional Administrator, Eastern Region, Don Senn, Regional Administrator, North Central Region, Todd Carlson, Acting Transportation Planning Manager, Daniela Bremmer, Director of Strategic Measurement, Nicole Ribreau, Acting Regional Planning & Coordination Manager, Rick Smith, Planning & Capital Program Management Director, Chris Picard, System Planning Manager, John Conrad, Assistant Secretary, Engineering and Regional Operations, Greg Lippincott, Acting Systems Planning Manager, Toby Rickman, State Traffic Engineer, Sandra Pedigo-Marshall, State Traffic Planning and Policy Manager, Tom Baker, State Materials Engineer, Dan Cotey, Transportation Planning Associate and Shelly McGuire, Executive Assistant, were also present at the Committee table.

Daniela Bremmer, Director of Strategic Measurement, opened the meeting and reviewed the agenda. Nicole Ribreau, Acting Regional Planning and Coordination Manager, reviewed the handout regarding the top eleven State Department of Transportations' performance measurement efforts that WSDOT found most useful. Each state tailors their performance measurement report to their specific requirements. The reports varied in writing techniques, approaches, organization and audience appeal. Ms. Ribreau noted that the Department's top ten findings were included in the reported. The three states WSDOT found to be of the most interest were Nebraska, Ohio and New Mexico. Ms. Ribreau gave an overview of the top eleven states: Arizona, Idaho, Minnesota, Nebraska, New Jersey, New Mexico, Ohio, Pennsylvania, South Carolina, Wisconsin and Texas. Secretary MacDonald stated that the information gathered is useful and provides stimulation for improvement in the Department's reports. WSDOT is probably the first state to compile transportation performance measures from around the country. Secretary MacDonald stated that the Gray Book closely represents the New Mexico quarterly report. Secretary MacDonald believes that the quarterly report is an important format for WSDOT to adopt since it functions as a management tool and does not merely provide an annual snapshot. The Transportation Commission's annual report and "Key Facts" are equally as important since they provide different sets of facts and figures. These separate reports create an integrated view of departmental information. To be successful, the Gray Book needs to target both external and internal audiences. Internally management utilizes the document and delivery to an external audience produces management accountability. Understanding the programs leads away from a

journalistic style to a factual style when producing program performance indicators. Each state has developed its own pattern and standards, and it is important for WSDOT to define its own objectives, indicators and measures.

Secretary MacDonald stated that development of traffic congestion measurement is ongoing. Daily traffic tracking data provides concrete real time performance indicators. The Department will continue to track traffic and learn to utilize the data more effectively as a management tool.

The Transportation Research Board has set up four committees to examine research needs important to the transportation system across the United States. John Conrad, Assistant Secretary, Engineering and Regional Operations, nationally chairs one of the committees which is responsible for travel reliability measures and incident response. Secretary MacDonald stated that WSDOT is on the cutting edge of these issues. It is important to measure and report real time results that are easily understandable by the general public. Recording travel times/speeds on given corridors at given times enables the Department to measure trends over time. The data can be used to calculate travel time ranges and standard deviation to estimate “normal” travel time. Examining the “outliers” in the data and comparing flow charts with Washington State Patrol incident charts revealed outliers’ correlation with incidents. Understanding normal travel time, free flow travel time and optimum travel time with respect to congestion is important in developing congestion relief improvements.

Toby Rickman, State Traffic Engineer, gave an overview of the traffic flow theory. The throughput of an area declines at higher speed, if drivers maintain proper stopping distances between vehicles, therefore, the best speed for maximum throughput may not be the posted speed limit. Mr. Rickman stated that the goal of ramp metering is to optimize the vehicle through-input. Secretary MacDonald stated that WSDOT needs to create a system to optimize the transportation capital investment by managing the freeway at the right speed for maximum throughput. Instead of using TTI congestion index, WSDOT aims to promise a specific reliable best speed. Mr. Rickman explained that using ramp metering with a goal to produce optimal freeway flow, creates traffic backups on arterials and city streets. Ramp metering needs to be complemented by high occupancy vehicle (HOV) lanes, incident response, direct access ramps and capacity expansion. Secretary MacDonald stated the travel rate index is not adjusted for incidents. The travel rate index makes the assumption that free flow is the target, however, the target should be optimum travel time with incidents separate. Travel time and incident data collected could be used to build predictive models enabling the Department to optimize public dollars investment.

Sandra Pedigo-Marshall, State Traffic Planning and Policy Manager, showed a video regarding an incident on January 4, 2002 as an example of incident response. Mr. Rickman stated that operations planning’s initiative is to improve incident response and to lessen the impact on the traffic flow. Commissioner Maher inquired as to incident responses’ affect on benchmarks.

Mr. Rickman discussed the results of an incident response study on 405. The State Patrol is working with WSDOT to develop a new dispatching system to reduce delay times.

Ms. Bremmer provided a handout regarding bridge performance measures. Secretary MacDonald stated that the 4-page handout will be included in the February 2002 Gray Notebook. It provides a journalistic description of the bridge program that differs from the direction of the Blue Ribbon Transportation Commission. The four components of the bridge management program are: inspection, rehabilitation/repair, preservation and risk reduction. Inspection ties into the bridge maintenance system. The age distribution of bridges is critical to future rehabilitation and preservation funding requirements. All elements of the bridge program are progressing as scheduled with the exception of the scour program, which requires a management decision to proceed. Secretary MacDonald discussed structurally deficient and functionally obsolete bridges in Washington. Commissioner Davis stated that the focus should be on the Department's efforts to reduce the number of structurally deficient bridges by means of the bridge management program.

Tom Baker, State Materials Engineer, reported on the pavement management program. Mr. Baker discussed data collection and definition of pavement conditions from data methodology. Three measures used are pavement structural integrity, rutting and roughness. The data results identify pavement rehabilitation that is required, the areas that are addressed through the pavement management program and additional requirements that need to be addressed. Commissioner Davis suggested that the neighboring states' programs such as Oregon should be used as a comparison. Secretary MacDonald stated that the Department's goal is to attain zero pavements "due" through management measures and to tie measures to the budget.

Ms. Bremmer handed out a draft outline of the Gray Book publication that will be reviewed at the February 2002 Washington State Transportation Commission Regular Meeting.

The Committee meeting adjourned at 12:00 p.m. on January 18, 2002.